

## REMARKS

Favorable reconsideration and withdrawal of the objection and rejections set forth in the above-mentioned Official Action in view of the foregoing amendments and the following remarks are respectfully requested.

### Title

The title has been objected to as not being descriptive. In response, a new title, which is more clearly indicative of the claimed invention, is presented herein for the Examiner's consideration and approval.

### Specification

The specification has been amended to attend to place it in better form. It is respectfully submitted that no new matter has been added.

### Claims Status

Claims 1 through 12 remain pending in the application. Claims 1, 2, 5, 6, and 9 have been amended to even more succinctly define the invention and/or to improve their form. It is respectfully submitted that no new matter has been added. Claims 1, 6, and 9 are the only independent claims pending in the application.

### Claims Objection

It is acknowledged with appreciation that Claims 4, 5, 8, and 11 are merely objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. The claims remain in their dependent form, inasmuch as it is believed that Claims 1, 6, and 9 from which they depend will be found to be allowable.

### Art Rejections

Claims 1 and 2 are rejected under 35 U.S.C. § 102(e) as being anticipated by Japanese Patent Document No. 2003-215945 (Taguchi).

Claims 3, 6, 7, 9, 10, and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Taguchi in view of Japanese Patent Document No. 2002-132008 (Yoneda, et al.).

The rationale underlying each of the foregoing art rejections is succinctly set forth in the Official Action.

### Response to Art Rejections

The rejections are respectfully traversed.

Amended Claim 1 calls for an image forming apparatus that includes an image bearing member for bearing a toner image; an image forming unit for forming a toner image on the image bearing member; an intermediate transfer member to which the toner image is primarily transferred from the image bearing member, said intermediate transfer member rotating while being in contact with the image bearing member; an output unit for outputting information relating to a moving distance at a time when the intermediate transfer member rotates; and a conveying unit which, in an attempt to secondarily transfer the toner image on the intermediate transfer member to a predetermined position on a recording material, starts conveyance of the recording material.

Amended Claim 1 further includes and is characterized by a calculation unit for calculating information relating to a conveyance timing of the recording material on a basis of the information on the moving distance which is output by the output unit at a time when a rotation speed of the intermediate transfer member is switched from a first speed to

a second speed lower than the first speed; a storage unit for storing the information relating to the conveyance timing calculated by the calculation unit; and a control unit for controlling a rotation of an intermediate transfer member and a conveyance of a recording material by the conveying unit. In a case in which a rotation speed of the intermediate transfer member is switched from the first speed to the second speed lower than the first speed to secondarily transfer the toner image on the intermediate transfer member to the predetermined position on the recording material.

In Claim 1, the control unit sets a conveyance timing of the recording material by the conveying unit on the basis of the information relating to the conveyance timing stored in the storage unit.

In contrast, Taguchi discloses that a toner image consisting of a yellow image, a magenta image, a cyan image and a black image superposed on an intermediate transfer member is transferred as a secondary transfer onto a recording material after the recording material passes through a primary transfer part again. Taguchi discloses that, in order to reduce a speed of the superposed toner image to a low speed in which a recording material passes through the primary transfer section again, a time to start reducing a speed of an intermediate transfer member is set by adding a time (T5) in which a speed of the intermediate transfer member reach a second speed to a time (T4) in which a speed of the intermediate transfer member is reduced from a first speed to a second speed. However, Taguchi merely discloses a time to reduce a speed of an intermediate transfer member, Taguchi does not disclose or suggest calculation of information relating to a conveyance timing of the recording material on a basis of information relating to a moving distance which is output by an output unit at a time when a rotation speed of the intermediate

transfer member is switched from a first speed to a second speed lower than the first speed as recited in amended Claim 1. Further, Taguchi does not disclose or suggest that conveyance starting time of the recording material by the conveying unit is set on a basis of the information relating to the calculated conveyance timing as recited in amended Claim 1.

It is respectfully submitted that Taguchi does not expressly recite features in amended Claim 1 and therefore does not anticipate amended Claim 1.

Amended independent Claim 6 calls for an image forming apparatus that includes an image bearing member for bearing a toner image; an image forming unit for forming a toner image on the image bearing member; an intermediate transfer member to which the toner image is primarily transferred from the image bearing member, the intermediate transfer member rotating while being in contact with the image bearing member.

Amended Claim 6 further includes and is characterized by an output unit for outputting pulse signals in a number corresponding to a moving distance at the time when the intermediate transfer member rotates; a conveying unit, in an attempt to secondarily transfer the toner image on the intermediate transfer member to a predetermined position on a recording material, for starting conveyance of the recording material; and a control unit for controlling the rotation of the intermediate transfer member and the conveyance of the recording material by the conveying unit. In the case in which the rotation speed of the intermediate transfer member is switched from the first speed to the second speed lower than the first speed to secondarily transfer the toner image on the intermediate transfer member to the predetermined position on the recording material.

In Claim 6, the control unit controls the conveying unit to start the conveyance of the recording material at a timing that the number of pulses output by the output unit after the switching from the first speed to the second speed is started, has reached a predetermined number of pulses.

Amended independent Claim 9 calls for an image forming apparatus that includes an image bearing member for bearing a toner image; an image forming unit for forming a toner image on the image bearing member; an intermediate transfer member to which the toner image is primarily transferred from the image bearing member, the intermediate transfer member rotating while being in contact with the image bearing member.

Amended Claim 9 further includes and is characterized by an output unit for outputting pulse signals in a number corresponding to a moving distance at the time when the intermediate transfer member rotates; a conveying unit, in an attempt to secondarily transfer the toner image on the intermediate transfer member to a predetermined position on a recording material, for starting conveyance of the recording material; and a control unit for controlling the rotation of the intermediate transfer member and the conveyance of the recording material by the conveying unit. In the case in which the rotation speed of the intermediate transfer member is switched from the first speed to the second speed lower than the first speed to secondarily transfer the toner image on the intermediate transfer member to the predetermined position on the recording material.

In Claim 9, the control unit controls the conveying unit to start the conveyance of the recording material at a timing that the number of pulses output by the output unit after the formation of the toner image on the image bearing member in the image forming unit is started, has reached a predetermined number of pulses.

The Examiner recognizes that Taguchi does not disclose a drive motor detection unit. Accordingly, the Examiner relies on Yoneda, et al. for allegedly disclosing this feature.

Yoneda, et al. discloses that an encoder detects the rotations of shafts of a photosensitive member and an intermediate transfer member. In Yoneda, et al., the rotation speed and rotation acceleration are calculated by counting pulse signals detected by the encoder. If the calculated rotation speed fluctuates, a drive control value between a photosensitive member and an intermediate transfer member are calculated so as to eliminate the fluctuation of the calculated rotation speed. Yoneda, et al. merely discloses that a driving speed of an intermediate belt is set to eliminate fluctuations detected by a rotation speed by counting pulse signals detected by the encoder. However, Yoneda, et al. does not disclose or suggest that, in the case in which the rotation speed of the intermediate transfer member is switched from the first speed to the second speed lower than the first speed to secondarily transfer the toner image on the intermediate transfer member to the predetermined position on the recording material, the control unit controls the conveying unit to start the conveyance of the recording material at a timing that the number of pulses output by the output unit after the switching from the first speed to the second speed is started, has reached a predetermined number of pulses.

In addition, Yoneda, et al. does not disclose or suggest a control unit, which controls the conveying unit at a timing that the number of pulses output by the output unit after the formation of the toner image on the image bearing member in the image forming unit is started, has reached a predetermined number of pulses.

It is also respectfully submitted that Taguchi and Yoneda, et al. do not disclose or suggest certain inventive features recited in independent Claims 6 and 9.

It is also respectfully submitted that the combination rejection is not well founded. The Examiner has provided a *rationalization* for combining the teachings of the cited art based on the benefits of doing so. A combination rejection is proper only when there is some suggestion or motivation in the cited art *per se* to cause one having ordinary skill in the art to combine the teachings of the cited art. There is nothing in the cited art which supports the position that it can be combined in the manner suggested. Even if the art could be so combined, the mere fact that the art can be combined is not sufficient if there is no suggestions in the art that such a combination is desirable. For example, see ACS Hospital Systems, Inc. v. Montefiore Hospital, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984).

In view of the foregoing, it is respectfully submitted that independent Claims 1, 6, and 9 are allowable over Taguchi and Yoneda, et al. whether taken individually or in combination.

#### Dependent Claims

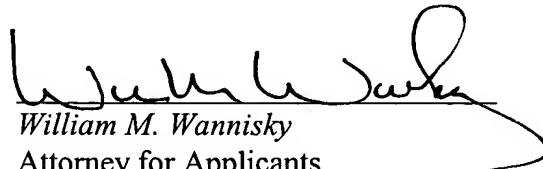
Claims 2 through 5, 7, 8, and 10 through 12 depend either directly or indirectly from one of Claims 1, 6, and 9 and are allowable by virtue of their dependency and in their own right for further defining Applicants' invention. Individual consideration of the dependent claims is respectfully requested.

#### Closing Comments

It is respectfully submitted that the pending claims are allowable over the art of record and that the application is in condition for allowance. Favorable reconsideration and early passage to issue of the present application are earnestly solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our New York office at the address shown below.

Respectfully submitted,



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